

IN THE CLAIMS:

1 1. (Canceled) An index generation method comprising the steps of: defining, in  
2 advance, basic index information concerning an index that constitutes data that  
3 describes contents; and generating said index by employing operating procedures that  
4 use said basic index information, wherein information relative to a triggering action for  
5 the generation of an index and information concerning a timespan for said index are  
6 defined for said basic index information.

7 2. (Canceled) The index generation method according to claim 1, wherein said  
8 information concerning said timespan, which is defined as said basic index information,  
9 is a timespan extending from the occurrence of a triggering action to an index start, and  
10 a timespan extending from the occurrence of a triggering action to an index end.

11 3. (Canceled) The index generation method according to claim 1, wherein the weight  
12 of said index is defined for said basic index information.

13 4. (Currently Amended) An index generation method comprising the steps of:  
14 defining, in advance, basic index information concerning an index that constitutes data  
15 that describes contents including a set of triggering actions; and generating said index by  
16 employing operating procedures that use said basic index information, wherein  
17 information relative to a triggering action for the generation of an index and information  
18 concerning a timespan for said index are defined for said basic index information ~~The~~  
19 ~~index generation method according to claim 1~~, wherein said basic index information  
20 defines information concerning ~~the~~ a hierarchy of at least one higher triggering action

1 related to a lower triggering action such that said lower triggering action comes within  
2 said higher triggering action for a single triggering index that is formed for a single  
3 lower triggering action, and the wherein a higher index covering said higher triggering  
4 action is added when the lower index covering said lower triggering action is added.

5 5. (Currently Amended) An index generation method comprising the steps of:  
6 defining, in advance, basic index information concerning an index that constitutes data  
7 that describes contents; and generating said index by employing operating procedures  
8 that use said basic index information, wherein information relative to a triggering action  
9 for the generation of an index and information concerning a timespan for said index are  
10 defined for said basic index information ~~The index generation method according to~~  
11 ~~claim 1,~~ wherein said basic index information defines information concerning said a  
12 composite index that is formed by the effects produced by multiple at least two  
13 triggering actions acting together.

14 6. (Currently Amended) An index generation method that uses a at least one triggering  
15 action to trigger the index generation of an index which is data concerning contents,  
16 comprising the steps of: selecting a at least one triggering action from among a set of  
17 multiple triggering actions that are defined in advance; determining an index effective  
18 time range for said selected triggering action, based on a first timespan extending from  
19 the occurrence of a triggering action to an index start and a second timespan extending  
20 from the occurrence of a triggering action to an index end, said timespans being defined  
21 in advance; ~~and~~ generating an index corresponding to said triggering action based on  
22 said effective time range; and  
23 calculating a weight value from an algebraic formula containing said first timespan, said  
24 second timespan and a weight constant.

1 7. (Canceled) The index generation method according to claim 6, wherein another  
2 index for which a part, or all of said effective time range is determined is added to  
3 contents.

4 8. (Currently Amended) The index generation method according to claim 6, wherein  
5 at least two triggering actions act together for said with a first timespan extending from  
6 the occurrence of said a first triggering action to said index start, and said a second  
7 timespan extending from the occurrence of said a second triggering action to said index  
8 end and for an intermediate period between said first triggering action and said second  
9 triggering action, a different value constant is defined in advance for each triggering  
10 action, and said effective time range is determined based on said defined values of said  
11 first timespan, second timespan and intermediate period.

12 9. (Canceled) An index generation apparatus for generating an index, which is data  
13 that describes contents, comprising: index data definition means for defining index data  
14 to be added to contents in advance; contents output means for outputting contents to  
15 which said index is added; triggering action input means for receiving a triggering  
16 action, which acts as a trigger for an index, relative to said contents; and index  
17 generation means for generating said index based on said index data defined by said  
18 index data definition means, and said triggering action being received by said triggering  
19 action input means.

20 10. (Canceled) The index generation apparatus according to claim 9, wherein said  
21 index data that is defined by said index data definition means includes: triggering  
22 information that defines information concerning a triggering action; and single

1 triggering index information for determining an effective time range formed by the  
2 occurrence of a triggering action and the importance level of an index.

3 11. (Canceled) The index generation apparatus according to claim 10, wherein said  
4 index data that is defined by said index data definition means includes: multiple  
5 triggering index information that defines index data obtained by multiple triggering  
6 actions affecting each other; and additional information that defines information to be  
7 individually added to indexes.

8 12. (Canceled) The index generation apparatus according to claim 9, further  
9 comprising: input history data storage means for storing said received triggering action  
10 as history; correction contents output means for employing said triggering action stored  
11 in said input history data storage means to display or output contents used for  
12 correction; and triggering action correction means for correcting said triggering action  
13 for said contents that is output by said correction contents output means.

14 13. (Canceled) An index generation apparatus, for generating an index that provides  
15 meaningful information concerning video, comprising: display means, for displaying  
16 video and for displaying a list of triggering action types, which act as a trigger for an  
17 index addition, that are registered in advance; and input means, for receiving, in  
18 accordance with the occurrence of a triggering action in said video displayed by said  
19 display means, a necessary triggering action from said list of said triggering action  
20 types.

21 14. (Canceled) The index generation apparatus according to claim 13, wherein said  
22 display means displays a list of additional information that are registered in advance, in

1 addition to said list of triggering action types, and said input means receives necessary  
2 information that is selected based on said list of additional information that is displayed  
3 by said display means.

4 15. (Canceled) The index generation apparatus according to claim 13, further  
5 comprising: processing means, for processing a triggering action input by said input  
6 means, wherein said processing means determines an effective time range for an index,  
7 including the times preceding and succeeding the occurrence of said received triggering  
8 action, and also determines the importance level of said index.

9 16. (Canceled) An index addition system, for a contents provider that provides video  
10 contents, comprising: index addition means, for adding an index, which is meaningful  
11 information, to contents, wherein said index addition means determines a triggering  
12 action, which acts as a trigger for an index addition, and adds said index using a  
13 timespan extending from the occurrence of said triggering action to an index start, and a  
14 timespan extending from the occurrence of said triggering action to an index end.

15 17. (Canceled) The index addition system according to claim 16, wherein said index  
16 addition means adds two or more different and independent indexes to a specific portion  
17 of said contents.

18 18. (Canceled) A program that permits a computer to perform: a function for defining,  
19 in advance, basic index information, which is information concerning an index that  
20 constitutes data that describes contents; and a function for generating said index through  
21 operating procedures using said basic index information, wherein said basic index  
22 information defines information concerning a triggering action and information

1 concerning a starting time and an ending time that fall in a predetermined timespan  
2 beginning at the occurrence of said triggering action.

3 19. (Canceled) The program according to claim 18, wherein said basic index  
4 information defines information concerning the hierarchy of a single triggering index  
5 formed of a single triggering action, and information concerning an index that is formed  
6 by multiple triggering actions affecting each other.

7 20. (Canceled) A program for implementing a function that uses a triggering action to  
8 trigger the index generation of an index which is data concerning contents, permitting a  
9 computer to perform: a function for receiving a triggering action that is selected from  
10 among multiple triggering actions defined in advance; a function for determining an  
11 effective time range for an index based on a timespan extending from the occurrence of  
12 a triggering action to an index start, and a timespan extending from the occurrence of a  
13 triggering action to an index end, said timespans being defined in advance; and a  
14 function for employing said effective time range to generate an index corresponding to  
15 said triggering action.

16 21. (Canceled) The program according to claim 20 that permits said computer to  
17 further perform: a function for adding another index upon the initiation of another  
18 triggering action for that portion of contents for which an index is generated by said  
19 triggering action.

20 22. (Canceled) A storage medium on which a computer stores a computer readable  
21 program that permits said computer to perform: a process for defining, in advance, basic  
22 index information, which is information concerning an index that constitutes data that

1 describes contents; and a process for generating said index through operating procedures  
2 using said basic index information, wherein, in said process for defining said basic  
3 index information, information concerning a triggering action, which acts as a trigger  
4 for an index generation, and information concerning a starting time and an ending time  
5 that fall in a predetermined timespan beginning at the occurrence of said triggering  
6 action are defined.

7 23. (Canceled) A storage medium on which a computer stores a computer readable  
8 program for implementing a function that uses a triggering action to trigger the index  
9 generation of an index which is data concerning contents, said program permitting a  
10 computer to perform: a process for receiving a triggering action that is selected from  
11 among multiple triggering actions defined in advance; a process for determining an  
12 effective time range for an index based on a timespan extending from the occurrence of  
13 a triggering action to an index start, and a timespan extending from the occurrence of a  
14 triggering action to an index end, said timespans being defined in advance; and a  
15 process for employing said effective time range to generate an index corresponding to  
16 said triggering action.

17 24. (Newly added) A method according to claim 4, further comprising a step of  
18 determining an index effective time range for said lower triggering action, based  
19 on a first timespan extending from the occurrence of said lower triggering action  
20 to an index start and a second timespan extending from the occurrence of said  
21 lower triggering action to an index end, said timespans being defined in advance;  
22 and generating an index corresponding to said triggering action based on said  
23 effective time range; and

1 calculating a weight value from an algebraic formula containing said first timespan, said  
2 second timespan and a weight constant.

3 25. (Newly Added) A method according to claim 24, in which said algebraic  
4 formula contains a declining exponential containing said first timespan, said  
5 exponential being multiplied by said weight constant.

6 26. (Newly added) A method according to claim 5, further comprising a step of  
7 determining an index effective time range for said at least two triggering actions,  
8 based on a first timespan extending from the occurrence of a first of said  
9 triggering actions to an index start and a second timespan extending from the  
10 occurrence of a second triggering action to an index end, said timespans being  
11 defined in advance; and generating an index corresponding to said triggering  
12 action based on said effective time range; and  
13 calculating a weight value from an algebraic formula containing said first timespan, said  
14 second timespan and a weight constant.

15 27. (Newly added) The index generation method according to claim 26, wherein at  
16 least two triggering actions act together with a first timespan extending from the  
17 occurrence of a first triggering action to said index start, and a second timespan  
18 extending from the occurrence of a second triggering action to said index end  
19 and for an intermediate period between said first triggering action and said  
20 second triggering action, a different constant is defined in advance for each  
21 triggering action, and said effective time range is determined based on said  
22 defined values of said first timespan, second timespan and interval period.



1        28.    (Newly added)    An article of manufacture in computer readable form  
2                   comprising means for performing a method for operating a computer system  
3                   having a program , said method comprising the steps of claim 4.

4        29.    (Newly added)    An article of manufacture in computer readable form  
5                   comprising means for performing a method for operating a computer system  
6                   having a program , said method comprising the steps of claim 24.

7        30.    (Newly added)    An article of manufacture in computer readable form  
8                   comprising means for performing a method for operating a computer system  
9                   having a program , said method comprising the steps of claim 5.

10       31.    (Newly added)    An article of manufacture in computer readable form  
11                   comprising means for performing a method for operating a computer system  
12                   having a program , said method comprising the steps of claim 26.

13       32.    (Newly added)    An article of manufacture in computer readable form  
14                   comprising means for performing a method for operating a computer system  
15                   having a program , said method comprising the steps of claim 6.

16       33.    (Newly added)    An article of manufacture in computer readable form  
17                   comprising means for performing a method for operating a computer system  
18                   having a program , said method comprising the steps of claim 8.

1           34.    An article of manufacture in computer readable form comprising means for  
2                   performing a method for operating a computer system having a program , said  
3                   method comprising the steps of claim 27.